PROGRAMMING FOR INTERPERSONAL SKILLS IN CLINICAL TEACHING

By

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The purpose of this study was to validate the development of effective clinical teaching behaviors, particularly the acquisition of interpersonal skills in health related professionals. The method for achievement of this objective was the presentation of a model two-day training program with outcomes measured by two inventories: the Fundamental Interpersonal Relationship Orientation-Behavior (FIRO-B) and the Interpersonal Skills Scale (ISS).

Subjects were selected from a sample of community college educators responsible for the clinical rotations of health professions students. Responses of participants on ten subscales of the two inventories were gathered from pretest, posttest, and delayed posttesting sessions. Scores were then tested for significant differences through

ANOVA with a probability coefficient of .05 or less to reject the null hypotheses pertaining to the dependent variables.

Results of the analysis led to the rejection of two hypotheses and acceptance of a third. The conclusions drawn from the analysis were in response to three questions posed by the investigator. The question directed to determine if interpersonal skills could be developed was answered in the affirmative. This was based upon the significant differences in scores between program and non-program subjects on the *wi* (wanted inclusion) subscale of the FIRO-B. The question concerning the sensitivity of existing instrumentation to detect changes in subjects led to the conclusion that present inventories are inadequate and that possibly subjects are sensitized to treatment by the Interpersonal Skills Scale (ISS). The third question answered by the research led to the conclusion that health professionals valued interpersonal skills development for clinical teaching based upon subjective evaluation of the programming.

Recommendations for further study included development of alternate methods of outcome measurement including the creation of instruments with increased sensitivity, direction of students and peers to evaluate instructor performance, and training of program

leaders to verify change in participants. Other suggestions include implementation of interpersonal relations training for all health professionals as a part of the curriculum in existing programs of study. Also, orientation of all employees in the health care setting toward development of interpersonal skills would improve their performance in the clinical setting.

CHAPTER I

INTRODUCTION

Background of the Study

Preparing a student in the health professions requires a complex of teaching skills. Foremost is directing and guiding students practicing delivery of health care in the clinical setting. Prior to clinical rotations, students are taught theoretical principles and a gamut of skills based primarily in the cognitive and psychomotor learning domains. The clinical rotation provides the setting for practice of these skills, but the instruction is complicated by the involvement of a third party, the patient. The patient is interjected between the preceptor and the learner and thus distinguishes clinical teaching from other instructional situations.

Clinical teaching also differs from classroom or laboratory instruction in several other respects. Clinical instructors are practicing professionals who have chosen delivery of health care as their primary obligation. They may or may not be financially compensated for the additional responsibility of instructing students in the clinical setting. They may have little background in learning theory, largely relying on their own experiences for instructional methods. Students in the clinical rotations are called upon to deliver care to a patient while demonstrating mastery of previously learned competencies. The health care environment is a complicated setting for teaching in that it is designed for the delivery of patient care and is generally physically unsuited for instruction. This environment requires the interaction of the health professional with the student in a one-to-one or small-group relationship, which necessitates teaching methodology different from that of classroom instruction. Because of these differences, the clinical teacher needs skills more complex than those required by most classroom instructors.

Statement of the Problem

Clinical rotations provide an opportunity for the student to apply skills and to interact with other members of the health care team in the hospital setting. These skills require competency in the often neglected affective domain. The clinical teacher is considered responsible for modeling desirable affective behaviors. These include the practice of effective interpersonal skills in dealings with patients and other health care personnel (Dixon and Koerner, 1976). The literature on health professions education focuses primarily on classroom instruction and on curriculum changes implemented to meet the demands of professional certification. Coincidentally, little emphasis has been placed on clinical instruction or on personal development of health care personnel. Zimmerman (1978) accused health personnel of "driving" the existing health fields toward increasing professionalism by expanding educational requirements and admissions criteria. As a result, medical educators produce individuals with highly specialized theoretical knowledge but lack flexibility and personal development. The result is a health professional unable to deal successfully with all of the challenges of the work environment.

Because so many clinical instructors are health care providers with little or no experience in education or skills in instruction, who themselves have been trained in programs based in theory alone, a gap exists in the preparation of health related personnel. In recent years, a few model programs have been designed to sensitize learners and to increase interpersonal skills in practicing professionals for their dealings with patients and other health team members. Indirectly, these experiences may provide the necessary stimulus for improvement in clinical education. Burra and Bryans (1979) support this new direction in medical education and have developed a program to facilitate the social development of the practicing professional. Like Zimmerman, they are concerned with the emphasis on technology. Burra and Bryans substantiate the reasoning of Dixon and Koerner (1976) that the clinical educator is primarily responsible for the personal growth of the student. The relationship between these two individuals (the clinical instructor and student) is the critical component which determines the eventual success of the student as a provider of health care.

Purpose of the Study

The purpose of this study was to conduct for the practicing clinical teacher in the health professions a model program through which skills necessary for effective clinical instruction could be developed. The format of this model was a two-day training institute for practicing health related personnel responsible for the clinical education of community college students. Enrollment in the program was limited to enhance interaction among participants and between leaders and participants.

The program was designed to develop in the health related educator effective teaching behaviors which ensure maximum use of the clinical rotation as a learning experience. Primary in this development is the acquisition of interpersonal skills which benefit educators on both an instructional and a practicing level when they are interacting with patients and other members of the health care team. An additional goal in this research was the attempt by the investigator to empirically validate the results of such a program through use of an experimentally designed study employing statistical tests to assess change in participants.

Analysis of Related Studies

The literature cited for this study included three areas: defining effective clinical teaching, programming in human relations, and studies in the development of clinical teaching and interpersonal skills in educators of health care personnel. Those considered most descriptive and representative of the literature are cited here. The rationale behind this review was that an assessment of the past research would indicate the teacher skills necessary to instruct students in the unique teaching environment that is the patient's bedside. Methods used to develop (affective) behaviors in groups from the literature of psychology, counseling, education, business, and medicine clarify techniques that have proven successful in earlier research. Finally, the analysis includes methods used by others in developing interpersonal skills in health professionals.

Definition of Effective Clinical Teaching

For years educators have conducted studies in teacher effectiveness. Most of these have concentrated on classroom teaching, and researchers have sought to quantify further those instructional approaches that facilitate the acquisition of cognitive skills. These studies in postsecondary and adult education have focused on student evaluation of instructor skill in a group situation, generally concentrating on teaching style and personality variables (Costin, Greenbaugh, and Menges, 1971). As researchers in this field note, classroom teaching is a small part of an instructor's responsibility in postsecondary education. A significant amount of time is devoted to developing individual learning experiences while assisting independent study or research projects or in counseling.

Rugg and Norris (1975) conducted research on student evaluation of instruction and the effectiveness of teachers supervising individuals' learning experiences. They first recognized the importance of this part of the learning process in adult education and conducted landmark research in this area. They concentrated on an evaluation by 125 graduate students of research-oriented learning experiences using a 51-item questionnaire. The results documented the high correlation between the involvement of the supervisor with the situation and the degree of satisfaction experienced by the student in the learning experience.

Spady (1973) devised a theoretical scheme for teacher effectiveness which involved three dimensions: subject matter knowledge, pedagogical expertise, and "charismatic" teacher qualities including stimulation, excitement, empathy, and concern for the student in the learning environment. Of these, empathy, concern, and stimulation possessed by the instructor seemed to be of uppermost value. Irby (1977), Stritter, Hain, and Grimes (1975), Parsons and O'Shea (1979), and Jacobson (1966) concurred with the findings of Spady following other research.

Irby (1977) investigated clinical teacher effectiveness at a Washington medical school. He sought to characterize the best and the worst clinical teachers. Three variables were considered in his study: the professional role of the rater (student, resident, or faculty member), clinical faculty specialty, and the teaching method used by the clinical instructor (formal, ambulatory, didactic, or informal). In a questionnaire mailed to 480 randomly selected faculty, medical students, and residents, Irby found that all individuals characterized as the best teachers those who were skilled in personal interaction, and material presentation, and who expressed enthusiasm. Conversely, the worst characteristic centered on those clinical instructors whose attributes included arrogance, lack of self-confidence, and dogmatism.

Stritter, Hain, and Grimes (1975) studied clinical instruction of physicians and found that those deemed to be effective clinical teachers generally possessed energy and good interpersonal skills, and were interested in student comprehension. They surveyed 265 medical students during their clinical rotations. Participants were asked to rank 77 items describing dimensions of clinical teaching. Stritter concluded that the most effective clinical teacher provides a personal environment in which the student is an active participant.

Parsons and O'Shea (1979) solicited from nursing instructors and students their ideas concerning effective clinical teaching. Those behaviors of the clinical instructor identified as facilitative to learning included positive and honest feedback, constructive criticism, the expression of support, concerned understanding, friendliness, and enthusiasm.

In a study of 961 undergraduate students in five of eight university medical schools in the South, Jacobson (1966) used critical incidents technique to identify 58 requirements for effective clinical teaching. Among the three predominant requirements were instructor availability, general knowledge coupled with professional competence, and skill in interpersonal relations with students.

Cotsonas and Kaiser (1963) attempted to determine general categories of effective clinical instruction.

Using a factor analysis of data gathered from rating scales of teachers, they identified three important components in teacher performance: teacher attitude, technical teaching skill, and teacher knowledge.

Daggett, Cassie and Collins (1979), in a review of research on clinical teaching, commented on the relative paucity of empirically validated studies in this area of health related education. Their suggestions include careful analysis of existing data on teacher effectiveness and an expansion of programming to implement the findings of studies such as those of Stritter, Irby, and others to ensure and augment the clinical learning experience.

Programming in Human Relations

Programs in business, education, counseling and psychology to develop skills in guidance and personal growth are based on the Rogerian philosophy of psychotherapeutics. Carl Rogers (1962) identified the quality of the personal encounter as the single element which determines the extent that an experience releases or promotes development and growth. He promoted the postulate that an individual who is responsible for a helping relationship must possess certain characteristics in order to facilitate change of any type. These qualities have become known as the three attributes necessary for therapeutic change and are defined as congruence, empathy, and positive regard. Congruence is the ability to be relaxed and genuine in a helping relationship. Empathy is understanding. Positive regard is the recognition of the recipient of therapy as a worthwhile and valuable individual.

Studies developed by Truax (1966a) through use of taped interviews, inventories, and other instruments, validated Roger's theoretical framework of change in psychotherapy. Truax and Mitchell (1971) showed that counselors or therapists produced beneficial effect in treatment groups if they possessed genuineness, warmth, and empathy.

Schutz and Allen (1966) conducted a study of 71 participants at the Western Training Laboratory in human relations training using an instrument devised by Schutz, the Fundamental Interpersonal Relations Orientation-Behavior (FIRO-B), along with an open-ended questionnaire to measure change in participants. The purpose was to identify those qualities deemed necessary by the Rogerian conditions of a positive helping relationship. The dimensions measured by the FIRO scales were inclusion (interaction), control, and affection, closely aligned in concept to Roger's empathy, congruence, and positive regard. The results of the Schutz experiences were training labs that changed people selectively, depending on their initial personality, in a positive direction.

Roethlisberger (1954) used the phrase "human relations training" in business through a program for advanced training and research funded by the Ford Foundation at the Graduate School of Business Administration, Harvard University. The phrase described the development of individuals' ability to learn about their relations to others. The method of development involved the use of face-to-face interaction, small-group discussion, and open communications.

Other non-therapeutic, career-based groups developed for human relations skill training have been used in counseling and education. Clack, Conyne, and Strand (1975) conducted an interpersonal skills workshop for counseling students to improve skills, feedback, and regulation of affection needs. The basis of the sessions was a lab training approach involving active participation of trainees in the sessions. Clack et al. also sought to validate the outcome of the sessions through pre- and posttesting. They used Schutz's FIRO-B and an instructor-designed instrument called the Interpersonal Skills Scale (ISS). The methodology included a micro-counseling session focusing on one skill. Results of the session revealed statistically significant change scores of participants in the target behaviors.

The use of laboratory approaches, active participant action in effecting change in individuals, is justified by studies such as that of Argyris (1965). He found laboratory education methods to be superior to lecture formats in fostering change in participants in interpersonal relationships and group dynamics. His studies were based upon six-week courses conducted for senior executives dealing with management.

Miles (1960, 1965) conducted training labs for educators in two three-week conference settings to increase the human relations skills he defined as sensitivity, diagnostic ability, and action. The groups ranged from 30 to 150 persons and responses were measured through Leadership Behavior Description Questionnaire (LBDQ) and the Group Participation Scale (GPS). The results indicated positive change only in the GPS, demonstrating an increase of participants' ability to enter into transactions with others, possession of self-insight, and a realistic perception of others' behaviors and feelings.

Elbert (1970) employed videotaped feedback as a means of measuring training outcomes and also as a means of facilitating change in 24 education students. In a two-week program to improve self-concept, self-actualization, and interpersonal relations, conducted at East Texas University, he found no significant differences in those experiencing the videotaped conditioning from those instructed in other ways when measuring target feedback through the Personality Orientation Inventory (POI), FIRO-B, or Tennessee Self-Confidence Scale (TSCS).

Zealand (1976) developed a method for a human relations training to foster interpersonal relations. He conducted a course for 59 undergraduates and measured results by the POI and the FIRO-B. Participants in the course demonstrated differences on selected scales on each inventory, validating the success of programs devised to develop such abilities in group members.

Hartman (1979) reviewed the literature on the use of group methods to effect change in attitudes, behaviors, and feelings of individuals. He found that most studies to afford change were designed according to one of two models. The first was a medical model, designed for psychotherapeutic assistance to resolve conflict and difficulties. The second group used a growth model, to promote positive change and to increase awareness and enjoyment of experiences. The development of interpersonal skills generally relied on the growth model. Most studies reviewed concentrated on the process or the method to effect change, or on the outcome, reporting the measured results. Hartmann considered this a dichotomy of orientation, process vs. outcome, and as such a weakness in past studies such as those conducted by Miles, Rothleisberger, and others.

Strupp and Hadley (1977) suggest the use of multiple measures when evaluating the change or success of training programs or therapy groups. They developed a tripartite model of outcome which includes personal assessment, social assessment by peers or colleagues, and personality assessment by group leaders or therapists. The Strupp and Hadley method has been widely used in psychotherapeutic change groups. Although the use of multiple measures such as those proposed by Strupp and Hadley may not be possible in some growth groups, the use of alternate measurements of growth such as critiques, video tapes, atmosphere scales, counting of target behaviors, and projective tests have been suggested as means of strengthening research using group methods.

Clinical Teaching Skills Development in Health Related Educators

Daggett, Cassie, and Collins in a review (1979) of the literature on clinical teaching reported that training programs in this area were not extensive. Bocknek (1971) observed that in fields such as law, ministry, medicine, and psychology, specific attention is rarely given to the training of supervisors of students in practicum situations.

Most students on clinical teaching were characterized by offering techniques to facilitate the learning experience by role modeling. Many studies were descriptive and identified the components of a successful learning situation. Scully's study (1974) was typical in that it was designed to identify teacher behaviors such as questioning, coaching, pacing, and evaluating which were considered important in clinical teaching.

Clinical faculty or clinical training programs are rare. One of the earliest programs devised by the Royal College of Nurses in 1947 consisted of a one-month program to prepare teachers of assistant nurses in classroom situations. Two weeks of the program involved visits to the wards.

Harris, Long, and Byrne (1976) devised a teaching methods course in Manchaster, England, for general practitioners. The program included four courses: person-to-person teaching to develop counseling skills, small-group teaching, teaching behavior, and micro-teaching experiences. The outstanding feature of the work accomplished by these medical educators was their concentration upon process as well as their attempt to determine the product of their programming through evaluation.

Stritter and Hain (1977) developed a one-day workshop for clinical teaching faculty. Objectives were to develop effective clinical teaching through evaluation of teaching situations and simulations recorded by videotape. By the end of the session, teachers felt they had acquired skill in the ability to examine their own strengths and weaknesses in the teaching environment. Evaluation of the workshop consisted of opinions by participants concerning presentations, but no other measurement of outcome was collected.

Prentice and Metcalf (1979) conducted at the University of Nebraska College of Medicine a workshop to provide medical faculty an opportunity to develop teaching skills. The course met for 12 weeks and concentrated on classroom presentations including study in curriculum design, lecture methods, and measurement. The study was oriented toward the method used in the workshop with an attendant's subjective comments serving as a validating tool.

One study dealt specifically with interpersonal skills development in clinical medicine primarily involving the practicing physician in dealing with patients (Robbins, 1979). The interpersonal skills that were objectives of the program included communication, listening, handling emotional issues, and facilitative behaviors. Robbins was concerned with the dual role of the clinician as a helper in a Rogerian framework. The medical professional who instructs also deals with patients and therefore is necessary for facilitating the relationship between two parties as a matter of ensuring success whether it be in instruction or in providing therapy.

The basis of the Robbins program was research done concerning patient compliance and physicians. The conduct of physicians, in particular their friendliness and warmth rather than continuity or accessibility to their patients, determined success in obtaining patient adherence to a suggested regime or therapy. Other investigators found that classroom discussion of desirable interpersonal skills was not effective in affording skills to participants. Robbins, as a result of this information, designed for medical residents the program through an interpersonal process recall (IPR) design to develop interpersonal skills. The format of the program was to provide feedback through videotape review of the residents' interaction with patients. The purpose of such a technique was to afford residents the opportunity to view their development of specific skills.

Robbins' program was unique in that he concentrated on the process (method) as well as outcome or product. Following completion of the learning experience, medical residents measured change in participants through the Eysenck Personality Inventory (EPI) and the Personal Orientation Inventory (POI), finding positive changes in participants' scores measured preceding, immediately following, and two months after the learning experience.

Conclusion

Interest in strengthening clinical instruction is a relatively recent concern in health professions education. The above review cites those studies, which in the opinion of the investigator, contributed most to this area of study during the time period preceding this dissertation.

Definitions

The following definitions represent uses of these terms in the study:

Health professional or health related professional is an individual who provides care within the health care facility (clinic or hospital). The professions included in this composite are nursing, respiratory therapy, medical technology, dental hygiene, occupational therapy, physical therapy, radiography, and dietetics.

Clinical rotation is the learning experience conducted on hospital wards, generally led by attending physicians or other health professionals, in the vicinity of a patient or a class of patients (Stritter, Hain, and Grimes, 1975).

Interpersonal skills are behaviors demonstrated by an individual in a one-to-one or small-group setting including skills in attending, communicating, giving feedback, and listening, all designed to facilitate effective relationships between involved parties.

Health professions education is a composite of learning experiences consisting of classroom instruction in the basic sciences, laboratory investigation, and application of principles in a medical setting.

Micro-teaching is role playing that is videotaped and replayed to participants to provide feedback to the learner and enhance simulation of actual teaching situations.

Questions Under Investigation

The focus of this study was the development of effective teaching behaviors appropriate to instruction in the clinical setting of health professional education. Specifically, the following questions were posed:

Question 1--Can interpersonal skills identified as essential to good clinical teaching be developed through an instructional situation?

Question 2--Will participants in a program to develop target behaviors answer assessment inventories differently from those not involved in a treatment program to develop interpersonal skills?

Question 3--Will subjective evaluations of a training program correlate with measured changes in participants?

In order to answer these questions, the following hypotheses were tested:

Hypothesis 1--Clinical teachers completing a training institute to develop interpersonal skills will not score significantly different on any of the six subscales of the Fundamental Interpersonal Relationship Orientation - Behavior (FIRO-B) from individuals not subject to the treatment program.

Hypothesis 2--Clinical teachers completing the training institute to develop interpersonal skills will not score significantly different on the Interpersonal Skills Scale (ISS) from those not enrolled in the program.

Hypothesis 3--Subjective evaluations by participants of the training program will relate negatively on measures of change in skills on the FIRO-B and ISS scales.

Assumptions and Underlying Values

Three assumptions are basic to this study:

1. The fact that participants in the program came from several health related specialties would not significantly affect responses to the learning experience.
2. The small sample size necessary to facilitate the development of target behaviors in the participants and provide an environment conducive to their growth rather than threaten them would not affect outcomes of the learning experiences.

3. Initial differences in the experience of the participants in both teaching and medical practice would not affect the outcome of the programming and would be controlled by appropriate statistical measurements.

Limitations

Because of the nature of the questions under investigation and of the resources available to the investigator, the following limitations must be considered:

1. Subjects involved in the study were self-selected and were volunteers. Because participation in the program necessitated compliance, a random selection of subjects was not possible.
2. Because members of the program were from close geographical vicinities, the outcomes of the experience will be difficult to separate from other factors in the organization which could affect the treatment and measured outcomes.
3. The instruments available for measuring outcome could be reactive in nature and could sensitize the subjects as used as pretests and posttests (Campbell and Stanley, 1963).
4. Identifying a comparable control group would be difficult. A closely associated composite of

individuals could be selected for comparison but would not be identical in all attributes to participants in the treatment program.

5. The longevity of change as measured by instrumentation is not assessable by the current experimental design.

Organization

Chapter I of this dissertation introduces the topic, presents relevant studies, and defines the limitations encountered. Chapter II presents the procedure. Chapter III reports the findings. Chapter IV is a summary of the study and is accompanied by conclusions and recommendations.

CHAPTER II

PROCEDURE

Subject Identification and Selection

Faculty and administrators of Santa Fe Community College, Gainesville, Florida, agreed to sponsor a two-day training institute through the Division of Health Related Programs. Individuals invited to participate in the institute were adjunct instructors for the college. Their primary obligation included facilitating clinical education for health professions students during their rotations in selected clinical training sites. Enrollment in the institute was limited. Announcements were sent to the three regional clinical facilities responsible for training health professions students: North Florida Regional Hospital, Alachua General Hospital, and Shands Teaching Hospital and Clinics, all of Gainesville, Florida.

Additionally, directors of Santa Fe health related programs were informed of the institute (Appendix A). From the above, 20 individuals volunteered for the program. The specialties represented included respiratory therapy, dental hygiene, nursing, radiography, emergency medical technology, and medical technology. A control group was identified from health related personnel enrolled in graduate programs sponsored by the Center for Allied Health Instructional Personnel, University of Florida. Like the treatment group, all members were practicing professionals with clinical teaching responsibilities.

Instrumentation

Two inventories were used to measure results of the training institute: the Fundamental Interpersonal Relation Orientation-Behavior (FIRO-B) and the Interpersonal Skills Scale (ISS). The Fundamental Interpersonal Relations Orientation Behavior questionnaire is a 54-item self-report instrument designed by Schutz (1958). The FIRO-B questionnaire describes an individual's behavior toward people in three areas: inclusion, control, and affection. For each of these, a subject indicates if the behavior is one typically displayed or expressed (e) or if it is desired, wanted (w). The congruence between expressed and wanted responses indicates a total measure of interpersonal skill. Schutz (1978) maintains that the closer the expressed and wanted scores on each subscale measure, the more healthy or adjusted one is in an interpersonal situation.

Designed as a measure of a person's characteristic behavior toward other people, the FIRO is used to assess relationships between people such as compatibility and coefficiency. The assumption behind the theory is that all human interactions involve inclusion, control, and affection and as such are classifiable in one of these three areas.

The attribute of inclusion involves interacting, communicating, attending, and exhibiting interest in another. Generally, positive scoring on the inclusion subscales indicates establishment by the treatment of associates with respect and attention.

Control as an attribute in interpersonal relationships involves decision-making processes and the ability to promote authority and direction in a positive direction without undue dominance and inflexibility.

The third scale, affection, is an indication of ability to maintain a satisfactory relationship with an appropriate amount of affection and concern. In certain associations, affection scales are generally regarded as needs to establish and maintain a loving or caring relationship.

These three attributes are similar in concept to the three variables identified by Rogers as necessary for a helping relationship: empathy, congruence, and positive regard. Therefore, the FIRO-B was selected as an inventory to measure development in those areas among program participants. Many investigators have used the

FIRO scales to measure compatibility, and outcomes of training programs, and in psychological assessment based upon its concurrent validity with other indicators or assessment measures (Lake, Miles, and Earle, 1973).

The FIRO awareness scales are derived from the theory originally presented in FIRO: A Three Dimensional Theory of Interpersonal Behavior (Schutz, 1958). The instrument contains six subscales: expressed inclusion (ei), wanted inclusion (wi), expressed control (ec), wanted control (wc), and expressed affection (ea), wanted affection (wa), with raw scores ranging from 0 to 9 on Guttman-type items. Low scores (0-3) indicate a deficiency in the measured area. A high score (6-9) is evidence of an excessive desire to fulfill the need area. An individual skilled in control, inclusion, and affection generally scores in the median (4-5) range (Ryan, 1977).

The Interpersonal Skills Scale (ISS) developed by Clack, Conyne, and Strand (1975) is an experimental inventory developed to measure the performance of four specific interpersonal skills: attending behavior, sensitivity and listening, expression of feelings, and feedback. This self-report inventory is scored by a Guttman scale with values ranging from 0 through 5, with high scores signifying the maximum or optimum in aforementioned skills. The subject rates possession of described characteristics on 24 statements.

Clack et al. based this inventory on Ivey's research (1971) in interviewing skill and used it as a measure of the results of an interpersonal skills workshop. They sought to promote trainee sensitivity to self and others in a counseling session. As such, the ISS contains validity for this research. The primary item of interest in this measure is the ability to communicate well with others in a one-to-one relationship such as occurs in a counseling session. As such, the ISS serves as an effective second measure of development in interpersonal skill.

Reliability and Validity

Two measures of reliability, the test-retest measure of stability and the split-half measure of internal consistency, have been assessed on the FIRO-B inventory. The stability coefficient, r, was reported as 0.76 when the average of the coefficients of all six subscales was determined ranging from 0.71 to 0.82. When the less stringent measure of internal consistency was determined on approximately 1500 subjects, the average value of r for all subscales was 0.94 employing the Kuder Richardson formula, with a range of values from 0.93-0.94 (Schutz, 1978). The content validity of the inventory was satisfactory for the objectives of this study.

Clack, Conyne, and Strand (1975) reported internal consistency of the ISS as 0.72. An assessment done by this investigator employing the Pearson product moment correlation formula in a test-retest trial on a control group proved to have a value of 0.74 with a range in values from 0.55 to 0.90 on the four subscales (Table 1). Validity of content was determined by item analysis.

TABLE 1

Reliability (Test-Retest of ISS Scales)

Scale	Reliability (r_{xx})	# of Subjects	Test Mean	Retest Mean
A	0.82	8	21.7	22.2
S	0.90	8	24.1	23.1
E	0.71	8	22.2	21.5
F	0.55	8	23.3	22.5
	$\bar{x}=0.75$			

A = attending

S = sensitivity

E = expression

F = feedback

$$r_{xx} = \frac{\Sigma[(x-\bar{x})\ (x'-\bar{x}')]}{N\ S_x\ S_{x'}}$$

Design

This study was experimental with random assignment of participants in a modified Solomon four-way design; both the main effects of testing and the interaction of pretesting and treatment were determinable (Campbell and Stanley, 1963).

Methodology

The two-day training institute conducted for faculty in clinical education had the following goals:

1. Development of person-to-person instructional strategies of health educators in clinical rotations.
2. Improvement of participants' ability to accurately perceive behavioral events and inferred feelings of students.
3. Maximization of participants' skill in intervention of situations involving group and personal activity.
4. Development of counseling skills desirable in clinical teaching concentrating on attending and feedback in instruction.

The methods used to meet such objectives were a series of activities presented in a laboratory format involving active participation of the trainees. In preparation for the sessions, technicians videotaped clinical teachers in regional hospitals instructing students at the patient's bedside or in an actual working situation. This included situations involving nursing, medical technology, and respiratory therapy, each demonstrating a different type of learning situation found in clinical instruction. The presentations were not staged and were realistic presentations by teachers and students. Clearance from appropriate hospital authorities and, when needed, patient permission were obtained.

On the first day of the institute the workshop leaders introduced the one-to-one teaching situation and consensus exercises identifying desirable clinical strategies, and clarified goals of the institute. In working through several sessions for discussion and clarification all participants began to feel comfortable with expressing their opinions and in dealing with other participants and program leaders. The consensus exercise was centered around an instrument developed by Stritter, Hain, and Grimes (1975) which was derived from the polled responses of students in the clinical phase of their educational program. Institute participants were asked to rank the attributes they felt most important to success in clinical teaching and these were compared with the results of the Stritter et al. study. This exercise served as a method of defining desirable teacher attributes. Appendix C contains this inventory as well as other materials presented during the two-day session.

In small group role playing in the form of telling exercises, participants began to display previously identified qualities which came to be defined as establishment of goals, motivation of students, communication, and reinforcing student progress. In particular, emphasis was placed upon communication skills and teacher sensitivity to student position in the learning situation. Display of warmth and genuineness was stressed as uppermost in importance in assuring a fruitful learning situation.

The second day of the institute was a continuation of the previous session. Participants were asked to prepare a teaching exercise that they felt to be typical of that encountered in clinical teaching. They were also challenged to confront and present a difficult situation and to practice the handling of the situation in light of newly identified attributes. Prior to their individual presentations, which were to be offered as microteaching exercises, members of the group saw a series of three actual clinical teaching situations which had been taped. The group reviewed each experience and critiqued each as to the strengths and weaknesses displayed by the clinical teacher under investigation. Microteaching sessions followed for the continuation of the session in which each participant presented an instructional situation practicing desirable skills and was videotaped. Discussion of each session by the group followed each exercise.

The sessions each day were eight hours long. Participants who served as subjects in the data gathering portion of the study participated for the entire two-day experience. Allowing for attrition, the final sample of treatment subjects was 19.

Pilot study

One month prior to the actual workshop, an abbreviated format of the training institute was presented to graduate students in the Division of Curriculum and Instruction at the University of Florida. This experience provided for the investigator practice in administration of the instruments, direction of activities, and feedback on the strengths and weaknesses of the presentation. Comments and criticisms of the session were compiled and revisions made to strengthen the learning situation for the program participants and to minimize group leader effect on the results of the training program.

Data Collection

The two-day training institute to develop effective clinical teaching behaviors centering on interpersonal skills was conducted at the South Campus of Santa Fe Community College, Gainesville, Florida. Upon entry into the program, 20 subjects of the treatment group (program participants) were randomly assigned to one of two groups.

Those in group G_1 were given the FIRO-B inventory prior to the program. Subjects were provided with a non-threatening atmosphere in which to take the inventory. Upon completion of the pretest session, the institute program was begun.

Upon conclusion, all participants (G_1 and G_2) answered the FIRO-B and the ISS questionnaire. Participants also evaluated the training program at this time.

Eight weeks after the institute, an explanatory letter and one copy each of the FIRO-B and ISS with a preaddressed and stamped envelope, was mailed to all program participants. They were instructed to complete both inventories and to return them in the envelope. Those tests were designated as the delayed posttest measurements and were solicited in an attempt to monitor longevity of change or delayed change which may have occurred since the workshop posttesting (Appendix C).

The control group was also randomly assigned to one of two groups. Those assigned to G_3 were asked to answer the FIRO-B and ISS inventory. Approximately two weeks after the initial administration of the pretest, both control groups (G_3 and G_4) were asked to answer the ISS and FIRO-B inventories as a posttest. Because random selection of treatment and control subjects was not possible in this study, random assignment was used to ensure that treatment and control groups were comparable.

The investigator hand scored completed questionnaires for the six subscales of the FIRO-B and the four subscales of the ISS. FIRO scores were further adjusted to deviation scores. Individual scores were subtracted from the median or optimum score of 4.5 and the means for all groups were calculated for each subscale. Simple means were derived for all groups on the four subscales of the ISS.

Plan of Analysis

The statistical test, ANOVA, was applied according to a 2x2 factorial design to ascertain differences between groups in mean scores on all subscales of the FIRO-B and the ISS. The first factor, program, had two levels, signifying whether the subjects did or did not participate in the treatment session. The second factor, pretest, also had two levels and signified the administration of the FIRO-B as a pretest.

Schematically, the assignment according to the modified Solomon (Campbell and Stanley, 1963) is depicted as follows:

	pretest	treatment	posttest	delayed post
G_1	^{O}FIRO	X	^{O}FIRO, ISS	^{O}FIRO, ISS
G_2		X	^{O}FIRO, ISS	^{O}FIRO, ISS
G_3	^{O}FIRO, ISS		^{O}FIRO, ISS	
G_4			^{O}FIRO, ISS	

Stratified for statistical test, the design is depicted thus:

Factor A; Program

Factor B; Pretest	G_1 n=9	G_3 n=10
	G_2 n=10	G_4 n=8

Analysis of the data gathered from the treatment and testing sessions of all subjects involved use of the Statistical Analysis System (SAS) program to determine a two-way ANOVA scores of all subjects. Scores on ten dependent variables (six subscales of the FIRO-B and four subscales of the ISS) were analyzed for each subject and *F* tests were run to determine significant differences on pretest, posttest, and delayed posttesting measures on program participants and control group members.

CHAPTER III

PRESENTATION AND ANALYSIS OF FINDINGS

In order to determine if effective clinical teaching behaviors, specifically interpersonal skills, could be developed in health professionals through programming, three null hypotheses were generated. As a means of accepting or rejecting these hypotheses a two-way analysis of variance was computed on control group and participant scores from the six subscales on the Fundamental Interpersonal Relationship Orientation-Behavior (FIRO-B) questionnaire and the four subscales of the Interpersonal Skills Scale (ISS) using the SAS program for ANOVA. Specifically, the analysis was performed to test the null hypotheses to answer the questions under investigation in this study. The questions were stated as follows:

1. Can interpersonal skills identified as essential to good clinical teaching be developed through an instructional situation?
2. Will participants in a program to develop target behaviors answer inventories differently from those not involved in a treatment program to develop interpersonal skills?

3. Will subjective evaluations of a training program correlate with measured change in participants?

Questions one and two were directed toward determining if interpersonal skills could be developed in an instructional situation such as that provided by a two-day program. Second, the questions were specifically devised to ascertain if participants would answer assessment inventories designed to measure change in interpersonal skills differently from non-participants of a training program.

The first null hypothesis devised to answer these questions was stated as follows:

> HO_1: Clinical teachers completing a training institute to develop interpersonal skills will not score significantly different on any of the six subscales of the Fundamental Interpersonal Relationship Orientation-Behavior (FIRO-B) from individuals not subject to the treatment program.

The two-way analysis of variance was used to determine the difference in mean scores on the four subject groups (two treatment and two control) for the six subscales (dependent variables) to identify significant change due to programming effect. $\underline{F}$ values were computed to identify differences in scores among and between subjects in both control and treatment groups. Also, the experimental design of Solomon was considered in the analysis so that the four groups were considered distinct and thereby controls for sensitization of subjects as a result of pretesting.

Contained in Table 2 are the cell means for the six subscales (expressed affection, wanted affection, expressed inclusion, wanted inclusion, expressed control, and wanted control) of the inventory thus identifying the scores which were tested by the analysis.

When the probability of F values for the sums of squares for all scales were examined, only one dependent variable, wanted inclusion (wi) tested a $PR < 0.05$. The F value of 5.02 yielded a probability of 0.03 thus signifying a difference in responses between control and treatment groups on this subscale of the FIRO-B posttest scores. The Solomon four-way design which controlled for the effect of sensitization by pretesting yielded no evidence of interaction between pretesting and program levels for this inventory administration.

The preceeding led to the rejection of the null hypothesis signifying a difference in treatment and control groups on the FIRO-B responses.

TABLE 2

FIRO-B Mean Scores of Control and Treatment Groups for the Six Subscales of the Instrument on Posttest (Deviation Scores)

	ea	wa	ei	wi	ec	wc
G_1	2.1	1.7	1.6	2.6	2.8	2.1
G_2	1.8	1.9	1.6	2.7	2.3	2.1
G_3	2.2	2.2	2.0	3.9	2.8	2.7
G_4	1.8	1.6	1.9	3.5	3.1	2.8
_F_ value	0.01	0.04	0.67	5.02	0.56	2.55
PR > _F_	0.90	0.83	0.41	0.03*	0.46	0.12

Calculations of delayed posttesting FIRO-B scores yielded means from the two treatment groups which were statistically similar to the posttest results. Since no differences between pretest and no pretest treatment groups were found, the two levels of the independent variable factor, pretest, were collapsed. The posttest means were therefore determined on 19 treatment subject scores (Table 3).

TABLE 3

FIRO-B Mean Scores of Treatment Groups for the Six Subscales of the Instrument on Delayed Posttest (Deviation Scores)

	ea	wa	ei	wi	ec	wc
G_1	2.2	2.4	1.2	2.8	2.4	1.7
G_2						

The second hypothesis tested was:

> HO_2: Clinical teachers completing the training institute to develop interpersonal skills will not score significantly different on the Interpersonal Skills Scale (ISS) from those not enrolled in the program.

Table 4 shows the cell means for the four subscales (attending, sensitivity and listening, expression of feeling, and feedback) of the two control and two treatment groups on posttesting scores.

When the probability of *F* values for sums of squares for the four subscales were examined, an interaction was found between pretesting and programming in the attending

TABLE 4

ISS Mean Scores of Control and Treatment Groups on Four Subscales of the Instrument on Posttest

	Attending	Sensitivity	Expression	Feedback
G_1	21.00	21.33	21.56	21.67
G_2	21.20	21.70	22.30	22.30
G_3	22.56	21.56	21.33	22.22
G_4	20.25	20.88	20.63	23.63
F value	I	0.15	0.05	1.00
PR > F	I	0.45	0.70	0.83

subscale (PR=0.04). All other PR values were greater than 0.05 signifying no significant differences between control and treatment groups on three of the four ISS subscales.

Simple main effects were then performed on the two control groups and the two treatment groups which is the same procedure as two one-way ANOVAs. Differences between the control and treatment groups were non-significant, although the variance between control groups was found to be disordinal depending upon pretesting with the ISS.

This led to suspicion of possible sensitization of subjects by the ISS in a pretesting situation.

Question three was directed at considering the subjective evaluations of the participants through a rating of evaluation instruments which were directed at measuring the expressed value of such programming by participants. The null hypothesis directed to answer this question was stated:

> HO_3: Subjective evaluations by participants of the training program will relate negatively on measures of change in skills on the FIRO-B and the ISS.

Testing of this hypothesis was achieved by researcher designation of a +1 or -1 score on the yes/no portion of the evaluation instrument. The mean score was +8.3 of possible scores from -9 through +9. This led to the rejection of the null for this question, indicating that participants valued such a program but that the change in behavior targeted by the program was not evident in participants at the time of the measurement.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to validate the outcome of programming designed to develop in health related professions instructors effective clinical teaching behaviors, centering on the acquisition of interpersonal skills. The method for achieving this goal was the presentation of a model two-day training program with outcomes measured by two personality inventories: the Fundamental Interpersonal Relationship Orientation-Behavior (FIRO-B) and the Interpersonal Skills Scale (ISS). The target behaviors to be strengthened by the program were identified as attending, feedback, communication, display of sensitivity, display of empathy, expression of warmth, genuineness, and exhibition of positive regard. Prior to the presentation of the program, a pilot session was conducted to receive feedback on strengths and weaknesses of the sessions and to minimize the interference of the trainer on programming.

The research sample for the study was identified from clinical educators of community college health professions students trained in the regional hospitals of Gainesville, Florida. Control subjects were a composite of health professionals who were involved in clinical teaching. The sample included 40 subjects, equally divided into treatment and control groups, and further designated as recipients of pretesting in a modified Solomon four-way design.

The responses of participants on the subscales of the two instruments gathered in pretest, posttest, and delayed posttesting sessions were analyzed using a two-way analysis of variance with a probability coefficient of .05 or less to reject the null hypotheses pertaining to the dependent variables.

Results of the data analysis suggest that skills centering on interpersonal behavior can be developed and that on at least one of the six dependent variables of the FIRO-B, the wi or wanted inclusion subscale, program participants' mean deviation score of 2.67 was significantly lower than the non-program participants' mean deviation score of 3.72 in a posttest measurement. These findings led to rejection of the null hypothesis that those in the treatment and the control groups would not differ on the six subscales of the FIRO-B.

Since no significant differences were found for the two groups on the ISS subscales, that null hypothesis was accepted.

The results of the analysis of yes/no responses on the program evaluation instrument was an average positive response of +8.3, indicating participants valued interpersonal skills instruction and leading to the rejection of the third null hypothesis.

Conclusions

Based upon the findings of this study, it may be concluded that interpersonal skills for clinical teachers in the health professions can be developed by programming such as that presented as a part of this study. Participants in this research who were introduced to experiences intended to strengthen interpersonal skills in communication, attending, feedback, and other behaviors centering on interaction did score significantly different on a portion of the Fundamental Interpersonal Relationship Orientation-Behavior inventory, the wanted inclusion scale. This scale is characterized as the one which indicates an individual's desire to interact, communicate, attend, and exhibit interest in another, treating associates with respect and attention.

From the program evaluation instrument, the participants in the workshop indicated they valued such an effort to improve clinical teaching and felt that such a program was beneficial.

Recommendations

Based upon the findings of this study, programming to develop interpersonal skills in the health professions was proven to be effective and of value for the enhancement of instructional practices and delivery of patient care. However, as a result of this investigation, several considerations arose which may effect future research in this field, and are submitted for review by others undertaking study in this area.

1. Clinical teachers in the health professions respond favorably to programming in interpersonal behaviors. The results of such programming can be validated and future attempts to strengthen health professionals' effectiveness as educators and as members of the health care team seems warranted.
2. Future attempts to develop target behaviors probably would best be accomplished in small groups with fewer than 20 participants in attendance. Unfortunately, such arrangements may lead to small and self-selected samples which may impede statistical validation of results.
3. Existing instruments to measure results of training programs may not be sensitive enough to measure such program objectives (e.g., change in participants' behavior) and may need to be

supplemented by other measurement techniques such as peer evaluation, student evaluation, and trainer evaluation.

4. Although longevity of change is the desired effect of programming, threats to internal validity, in particular history and maturation, may negate the statistical value of delayed measures of treatment (program effect).

Outcomes from this study would best be used through replicating this research design but employing an expanded evaluation method. Ideally, a tripartite evaluation technique such as that used by Strupp and Hadley (1977) in psychology to measure outcome of psychotherapy would be well suited in evaluating training programming for clinical faculty. This would require a sequential development of several portions to implement such a trial.

First, the tripartite method requires peer observation of outcome. In order to accomplish this, clinical faculty would need to be trained to evaluate the performance of their colleagues in instruction. Instruments and rating scales need to be designed and validated. Also, observation techniques would need to be learned, and practice of such in training programs is necessary to ensure rater consistency and reliability.

Second, student evaluations of clinical faculty would be beneficial as another peer evaluation measurement in the tripartite technique. In this type of program, the student evaluation may be more beneficial in measuring change than the self-evaluation measure suggested by this technique. In order to fully use student evaluations, construction of evaluation instruments with acceptable reliability would be necessary. Also, evaluators should understand the instruments.

Finally, trainer evaluation of health professionals in their clinical teaching in the environment of their actions (hospital or clinic), before, during and after a training program is needed to verify transfer and application of learned skills.

Another area of suggested investigation is the question of length of training programs. Generally, researchers believe that expansion of programming over a longer period of time would yield better and more lasting outcomes. In the case of this study, the expansion of this institute on developing interpersonal skills could be designed to cover a longer period, primarily providing more time to practice and to receive reinforcement. A recent study by Kauss, Robbins, Heinrich, and Abrass (1981) suggests that expansion of the training program to an increased period of time may not yield better interpersonal skills. For this reason, (1) the ideal length of programming, (2) the proper sequence of sessions, (3) longevity of sessions, and (4) the other variables that are critical to the outcome of participant growth are yet to be determined.

A third area of investigation in the acquisition of interpersonal skills is being explored in a few medical centers. Because researchers in education, psychology, and medicine have suggested that interpersonal skills are desirable and are rated highly by students in clinical rotation, integration of skills acquisition should be begun in programs to prepare clinicians. Model curricula need to be designed which emphasize communication, attending behavior, listening, and small-group interaction and leadership, thereby identifying these skills as important objectives in the training of health professionals. Integrated curricula need to be initiated which directly address these skills for the clinical instruction of colleagues, new employees, and students, and for patient education and treatment. Although a few centers have begun this, little verification of results or procedures has been added to the available literature. Also, attempts at correlating curricula modifications with growth of health professionals have not been published to date.

Through concentration on developing the clinical phase of health professional training, personnel are afforded several advantages. First, participants in programming benefit from demonstration of and practice in methods which are used to strengthen small group interactions, such as those needed in one-to-one teaching.

These include role-playing, simulation, microteaching, and discussion. Since the subject under discussion may not necessarily be restricted to teaching, this indirect instruction provides a non-threatening environment in which to direct participants' interaction with other health professionals.

Second, when the clinical phase of training is singled out and emphasized, the role of the clinician as teacher or instructor is delineated and recognized as a part of the professional role. Ideally, clinicians will be rewarded for their instructional technique and enthusiasm according to the same criteria that their other professional performance is assessed, such as patient care. The complete health care professional development program would include training in interpersonal skills and would be provided for every new employee in the medical facility. This would lead to providing more role models for health related students, to improved communication between health care personnel and patients and among health care team members, and ultimately to better health care for society.

APPENDIX A

INFORMATION FROM ANNOUNCEMENT OF TRAINING INSTITUTE

PERSON TO PERSON INSTRUCTION: CLINICAL TEACHING STRATEGIES FOR NURSING & ALLIED HEALTH PROFESSIONALS

SANTA FE COMMUNITY COLLEGE
FRIDAY, AUGUST 8 &
SATURDAY, AUGUST 9, 1980

BACKGROUND

Santa Fe Community College is providing for health professionals in the affiliate hospitals a two day training institute. The participants invited to this institute are individuals who direct and instruct students of the health related programs in their clinical teaching and rotations.

REGISTRATION INFORMATION

This institute is being provided for interested parties through the health related programs of Santa Fe Community College. Because registration in the institute is dependent upon space available, interested parties should return the registration form by mail no later than July 30, 1980, to secure a place.

The location of the institute is Santa Fe Community College, South Campus, 4300 SW 13th Street, Room 26.

PURPOSE

To examine and develop effective instructional strategies used by allied health personnel in clinical teaching.

APPENDIX B

INSTITUTE MATERIALS

CLINICAL TEACHING AND INTERPERSONAL SKILLS

AGENDA

I. Organization of Workshop

  A. Brainstorming Session: Problems in dyad teaching relationships

  B. Consensus exercise: Student Teaching Preference

  C. Clinical teaching techniques:

    1. Definition of roles
    2. Counseling
    3. Simulations
    4. Small Group Exercise

  D. Importance of a consistent teaching policy

II. Analysis and Evaluation of Videotaped Clinical Teaching Situations

  Application of Clinical Teaching Criteria in a Videotaped Simulation: "Micro-teaching"

III. Evaluation

OBJECTIVES OF WORKSHOP:

1. Improvement of participant sensitivity, that is ability to perceive what is actually going on in a teaching situation including both behavioral events and inferred feelings of the student.

2. Development of diagnostic ability in situational assessment to determine the action or behavior that will be effective in the current environment.

3. Maximization of skill in the intervention of situations which involve group and personal activity so as to maximize growth and effectiveness.

4. Increasing participant affection for student in the learning environment, that is the positive regard of instructor for learner.

5. Development of counseling skills to maximize learning relationships and to deal effectively with problems threatening to a harmonious learning situation.

WHAT ARE THE MOST HELPFUL TEACHING BEHAVIORS?

In 1974, literature on teaching behavior research and practice was reviewed with the goal of identifying helpful teaching behaviors of preceptors (teachers) in individual or small group settings. A list of 77 possible items resulted. In addition, a research project resulted in student identification of behaviors most helpful in facilitating their learning.

A representative twelve of the items are listed below in random order. Rank order items 1 through 12 as you think the students ranked them. It is important that you rank them as you think they are important to students, not as you would rank them yourself. Then rank them as they are important to you.

RANK

#1 #2

_____ _____ A. Assesses his student's comprehension of his teaching.

_____ _____ B. Attempts to learn social and psychological characteristics of his students, e.g. biographical data, career goals, etc.

_____ _____ C. Deals with students in a friendly, outgoing manner.

_____ _____ D. Approaches teaching and interactions with clients and patients with dynamism and energy. (3rd party present in teaching)

_____ _____ E. Defines realistic learning objectives for his students.

_____ _____ F. Discusses his personal interests when it seems appropriate.

_____ _____ G. Develops meaningful practice opportunities for students, i.e., gives student specific responsibilities.

_____ _____ H. Answers carefully and precisely questions raised by students.

_____ _____ I. Advises students of their progress regularly.

_____ _____ J. Recognizes and greets students even when they are not working together.

_____ _____ K. Encourages students to raise questions.

_____ _____ L. Treats students as colleagues.

WHAT ARE THE MOST HELPFUL TEACHING BEHAVIORS?

RANK		REMARKS
7	A. Assesses his student's comprehension of his teaching.	
11	B. Attempts to learn social and psychological characteristics of his students, e.g. biographical data, career goals, etc.	
6	C. Deals with students in a friendly, outgoing manner.	
2	D. Approaches teaching and interactions with clients and patients with dynamism and energy.	
5	E. Defines realistic learning objectives for his students.	
12	F. Discusses his personal interests when it seems appropriate.	
4	G. Develops meaningful practice opportunities for students, i.e., gives students specific responsibilities.	
1	H. Answers carefully and precisely questions raised by students.	
8	I. Advises students of their progress regularly.	
10	J. Recognizes and greets students even when not working together.	
3	K. Encourages students to raise questions.	
9	L. Treats students as colleagues.	

Guidelines for Evaluating Clinical Teaching or Person-to-Person Instruction

The Teacher in Contact with the Student:

A. ESTABLISHES GOALS AND EXPECTATIONS

B. MOTIVATES THE STUDENTS

C. STIMULATES THE STUDENTS MEMORY

D. DIRECTS THE STUDENTS ATTENTION

E. COMMUNICATES WITH STUDENT

F. PROVIDES PRACTICE FOR THE STUDENT

G. EVALUATES AND REINFORCES THE STUDENT

H. EVALUATES THE QUALITY OF ONE'S OWN TEACHING

(From Stritter, F. T., and Flair, M. D. *Effective clinical teaching*. Bethesda, Maryland: National Institutes of Health, National Medical Audiovisual Center, 1980.)

WORKSHEET FOR MICROTEACHING EXERCISE:

Subject:

Student characteristics:

Strategy:

Outline:

Improvements:

EVALUATION

SANTA FE COMMUNITY COLLEGE
CONTINUING EDUCATION

PROGRAM ______________________________

PLACE ______________________________ DATE ______________________

Please take a few moments to complete this evaluation. It will be helpful to facilitate future program planning. Please check the appropriate column (write NA if not applicable).

	Yes	No	Comments
Was the program accurately described?			
Were the objectives met?			
Was adequate time allotted for each area?			
Was useful resource material provided?			
Was audiovisual equipment satisfactory?			
Were your insights increased?			
Was the speaker well informed?			
Did he/she communicate effectively?			
Were the physical facilities and service adequate?			

What do you plan to do with the knowledge and skills acquired at this program upon return to your practice setting? ______________________________

____

What did you like most about this program? ________________

____

What did you like least? ______________________________

____

What kind of programs would you like to see offered in the future? (Please list.) ______________________________

____

Other comments: ____

____

APPENDIX C

COVER LETTER AND ISS INVENTORY SENT TO PROGRAM PARTICIPANTS

October 15, 1980

TO: Participants of Workshop on Clinical Teaching

FROM: Faye A. Sisk, Workshop Coordinator

On August 8 & 9 you participated in a workshop at Santa Fe Community College conducted by Dr. Frank Stritter and myself. At that time I believe you were informed that I would be sending you a questionnaire in October.

Please complete the following inventories and return them in the addressed and stamped envelope I have enclosed. Upon receipt of your response I will send you a profile that interprets your answers on the series of instruments that you have answered during the workshop and including this follow-up measurement.

I sincerely appreciate your assistance. Your evaluations of the workshop have been of much help in this study and I look forward to working with you in the future.

Thank you again for your help. I hope this experience has been a rewarding one for you.

Sincerely yours,

Faye A. Sisk

Faye A. Sisk

Interpersonal Skills Scale

This form is to help you think about various aspects of yourself, your relationship with others, and your skills in interpersonal relationships. Circle the rating scale at the end of each item at the point on the scale which you think best describes your own behavior.

When I talk with another person, I usually:

	not at all				all the time
1. appear comfortable and relaxed	1	2	3	4	5
2. appear disinterested and bored	1	2	3	4	5
3. look the person in the eye	1	2	3	4	5
4. interrupt the other's talking	1	2	3	4	5
5. compete for "talking time"	1	2	3	4	5
6. follow the others comments	1	2	3	4	5

When I talk with another person, I usually:

	not at all				all the time
7. sense the feelings of that person	1	2	3	4	5
8. am able to notice if the person is tense	1	2	3	4	5
9. am unable to identify hidden meaning in what is said	1	2	3	4	5
10. find that I misunderstand what the person is saying	1	2	3	4	5

	not at all				all the time
11. find that it is necessary to let the other person know I understand what is being said	1	2	3	4	5
12. do not not reactions to my comments	1	2	3	4	5

When I talk with another person, I usually:

	not at all				all the time
13. tell others part of what I think and feel	1	2	3	4	5
14. am able to express anger toward them	1	2	3	4	5
15. hide my emotions	1	2	3	4	5
16. am able to disagree openly when I want	1	2	3	4	5
17. am able to express warm feelings	1	2	3	4	5
18. have difficulty expressing gratitude	1	2	3	4	5

When I tell another person about himself/herself, I usually:

	not at all				all the time
19. try not to judge the person	1	2	3	4	5
20. make vague, general comments	1	2	3	4	5
21. try to make constructive comments	1	2	3	4	5
22. do not consider the other's needs	1	2	3	4	5
23. find my communication clear	1	2	3	4	5

When I tell another person about himself/herself, I usually:

not at all all the time

24. impose my values on the other 1 2 3 4 5

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BIOGRAPHICAL SKETCH

Faye Ann Allen Sisk was born on June 20, 1951, in Norfolk, Virginia. She was graduated from Terry Parker High School, Jacksonville, Florida, in 1969. She attended Agnes Scott College where she was named a Dana Scholar and was graduated in 1973 with a bachelor of Arts in Biology. Following graduation she was awarded a training grant from Emory University Hospital and became a medical technologist registered by the American Society of Clinical Pathology.

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Ms. Sisk is employed by IMS America, Ltd., as a representative for a hospital-based statistical network. She is responsible for training and supervising health professionals who participate in the collection of information on drug abuse for the U. S. Department of Health and Human Services. She lives in Atlanta, Georgia, where her husband is a pediatrician in private practice.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Margaret K. Morgan

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Leadership and Support

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